

Abstract

5 Dental caries in man may be prevented or treated by oral ingestion of
human or humanized murine monoclonal IgG and IgM antibodies that bind to surface
antigens of cariogenic organisms, such as *S. mutans*. The genetically engineered
monoclonal antibodies engage the effector apparatus of the human immune system
10 when they bind to cariogenic organisms, resulting in their destruction. In a preferred
embodiment, monoclonal antibodies to cariogenic organisms are produced by edible
plants, including fruits and vegetables, transformed by DNA sequences that code on
expression for the desired antibodies. The antibodies are applied by eating the plants.

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